



## FM knowledge – theoretical foundation and application in practice.

**Jensen, Per Anker**

*Published in:*  
Journal of Facilities Management

*Link to article, DOI:*  
[10.1108/JFM-11-2016-0050](https://doi.org/10.1108/JFM-11-2016-0050)

*Publication date:*  
2017

*Document Version*  
Peer reviewed version

[Link back to DTU Orbit](#)

*Citation (APA):*  
Jensen, P. A. (2017). FM knowledge – theoretical foundation and application in practice. *Journal of Facilities Management*, 15(3). <https://doi.org/10.1108/JFM-11-2016-0050>

---

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# **FM knowledge – theoretical foundation and application in practice**

## **Introduction**

The idea behind this special issue can be dated back to a whole day workshop that I organised on 7 November 2012 at our Centre for Facilities Management – RealDania Research (CFM), Technical University of Denmark. The title of the workshop was “Added Value and Advancements in FM knowledge”. The situation was that I since 2009 had chaired a European research group in EuroFM concerning “The Added Value of FM”. In spring 2012 this collaborative research work had culminated in publishing an anthology (Jensen et al., 2012). The purpose of the workshop was to discuss and possibly decide, whether we should continue collaborative research in the same vein or change direction towards other areas of joint interest. The 9 participants were from CFM and our closest collaboration partners in Denmark, Finland, Netherlands, Norway, Sweden, Switzerland and UK.

Before the workshop I had made a proposal for a possible new collaborative project called “Advancements in FM knowledge”. The purpose was “to create a broad state of the art of research based FM knowledge with focus on theory, evidence and practical implications as well as to outline directions for further research and development”. During the workshop this idea was discussed and elaborated together with the possibility to further develop the research on added value and as a new third option to focus on societal challenges or dilemmas with possible FM contributions. At the workshop 9 such challenges together with possible FM contributions were collected, including climate change/natural disasters, social media/ICT, demographics, poverty/injustice, recession/crisis, conflicting interests, ageing infrastructure/vacancies, global competition/productivity, and well-being.

The main outcome from my point of view was that I afterwards together with Theo van der Voordt, Delft University of Technology, decided to continue the work on added value with the aim to develop knowledge and methods that are more operational. In the further development we also decided to aim at a transdisciplinary integration of knowledge from FM and Corporate Real Estate Management. This resulted in a second book, which has just been published (Jensen and Van der Voordt, 2017).

The topic of “Advancements in FM knowledge” was also taken up afterwards in terms of creating a FM knowledge Map, see Figure 1. It shows that FM can be regarded as mostly a management engineering discipline. The FM knowledge map was developed by me and two co-authors based on a literature review of journal papers and published as a conference paper (Nenonen et al., 2014). However, when I was asked to be guest editor of this special issue, I decided that this would be a good vehicle to take this topic forward.

The third topic concerning societal challenges has not been taken forward to a great extent by any of the participants in the workshop. The identified challenges are mentioned above as possible inspiration for others to take up.

## **This special issue**

The theme of this special issue is “FM knowledge - theoretical foundation and application in practice”. The purpose very much resembles what was stated for the suggested project on advancement in FM knowledge: “to create a broad state of the art of research based FM knowledge with focus on theory, evidence and practical implications as well as to outline directions for further research and development”. Thus, the special issue does not aim to present original empirical research of current issues but rather to present meta-research presenting overview and evidence based views on the development in FM knowledge currently and over its short history as well as ideas for future research and development.

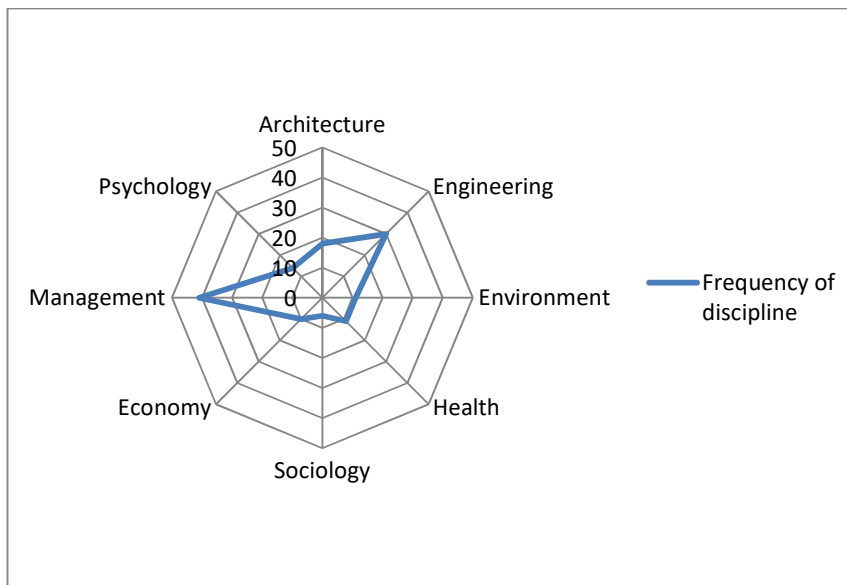


Figure 1. Disciplines mostly applied to FM (Nenonen et al., 2014)

The special issue is based on invited contributions. Invitations were sent to leading researchers, who have had a long time involvement in FM. The invited authors were asked to write a personal and thought provoking and inspirational essay on the theme. The authors were also welcome to write together with another researcher or a practitioner. The overall theme was in the invitation specified to include questions like:

- What characterizes FM as an academic discipline?
- What is the theoretical foundation or framework of academic FM knowledge?
- What areas of knowledge are distinct for FM with genuine theories – for instance Space Management?
- How to approach FM research – is it purely multidisciplinary or can it be transdisciplinary, what kind of challenges and possibilities does this cause?
- What are the similarities and dissimilarities between FM knowledge seen as an academic discipline and as a profession?
- FM as research based practice – go or no go?
- How is new FM knowledge developed, managed and/or applied in practice?
- Which knowledge and theories are needed or have strong potentials for the future development of FM?

### Understanding of FM and the five papers

The formulation of the questions are based on an understanding of FM as a sector consisting of a basis with activities and a superstructure with institutions as shown in Figure 2. I first presented this figure to illustrate the development of FM in my inaugural lecture as professor in 2009. FM consists of activities in practice that mostly existed in organisations, before FM was introduced as a new management concept. When management positions in charge of FM developed, the need to create professional associations soon emerged along with the need for professional education and creation and dissemination of new knowledge shown in the figure as the academic discipline covering research. Alongside, the need to carry out the activities in practice more efficiently led to a fast increase in outsourcing, which created a huge and still growing market as well as new provider industries.

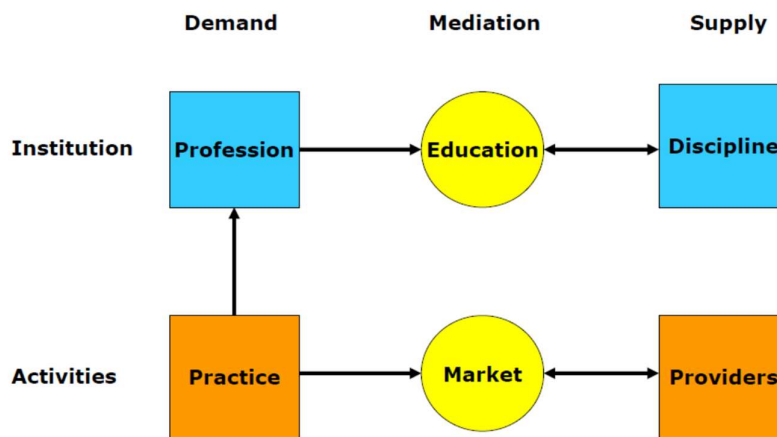


Figure 2. The development of FM with activities and institutions (Jensen and Andersen, 2010)

It is interesting to see how the 5 papers in the special issue are related to the FM sector in Figure 2. All papers take a development perspective and several papers have a longitudinal approach.

The first paper, “Facility Management Maturity and Research”, written by Kathy Roper is mostly concerned with the institutional layer and the relation between on one side the profession and on the other side education and research. Roper emphasises the need for soft skills in FM to complement the technical skills, which are currently the focus of most FM education and research, and she identifies competencies that deserve focus for future research and professional development. Roper also discusses the difficulties of moving research findings into practice. Based on experiences from the field of psychiatry she points to neutral and trusted intermediaries as a way to bridge the gap between research and practice. Roper finally presents a simple four step industry/university framework that can lead to research based solutions for FM.

The second paper, “Facilities Management and Corporate Real Estate Management: FM/CREM or FREM?”, by Theo van der Voordt is also mostly concerned with the institutional layer both in terms of profession and research with a focus on the similarities and dissimilarities between FM and the related discipline Corporate Real Estate Management (CREM). Van der Voordt argues that FM originates from professionalising IT services and traditionally is linked to facilitating people and business processes in buildings-in-use, while CREM regards accommodating people and usually is linked to the whole life cycle of buildings and real estate portfolios. He presents a brief outline of the history and key issues of both disciplines, including key publications, and discusses the possible convergence between FM and CREM. The conclusion is that FM and CREM are not interchangeable but have much in common. The focus on added value is clearly overlapping as a common theme.

The third paper, “In-house or Outsourcing FM Services in the Public Sector: A Review of 25 years Research and Development”, by Tore Haugen and Nora Johanne Klungseth focuses on a particular area of activities in practice and the related market development, but seen from the viewpoint of the institutional knowledge development over time in relation to this area. In that way their paper represents a more conventional academic research approach with a specific empirical focus area, but with a clear longitudinal perspective. The paper has an international perspective but with a particular focus on the development in Norway and the Nordic countries. The authors conclude that the knowledge regarding management of FM services in both the public and private sector has been developed over the last 2 decades. While the use of outsourcing has increased significantly over the

last 25 years, the Norwegian profile continues to have limited use of outsourcing; particularly in the public sector. There is still no quick answer to the issue of in-house or contracted out FM services.

The fourth paper, “Measuring the Productivity of Facilities Management”, by Jan Bröchner has a more conceptual and methodological focus on the wicked problem of how to measure performance of FM provider firms in terms of service productivity. Empirically this concerns the activities in FM practice with particular focus on provider firms but also as in the third paper seen from the perspective of institutional knowledge development over time. Bröchner argues that prior studies of productivity in FM are dominated by subjective assessments of how the environment affects the individual labour productivity of office workers. He presents an overview of the recent developments in the field of research on services and services industries with a focus on measuring service productivity. These developments in measuring have involved an increased attention on including issues of client or customer satisfaction as well as interactivity and co-production of services. Bröchner concludes that recent research on productivity of other categories of business services providers could be applied to the measurement of the productivity of FM firms.

The fifth paper, “Nordic Workplace Concept Development from Office as a City to City as an Office”, by Suvi Nenonen and Göran Lindahl, has a clear empirical focus on the development in practice in terms of workplace concepts over time. It is based on a multiple case study approach utilizing the viewpoint of institutional knowledge development. The purpose of the paper is to investigate forerunner cases from three decades in workplace concept development in Sweden and Finland and discuss them in relation to Nordic cultures. The cultural aspects in focus are power distance and individualism based on the work of Hofstede. Development in digitalization is seen as a major driver for the changes in workplace concepts, but the authors also find that the layer of organizational culture has its own impact on the development and implications of the concepts.

Together the five papers probably do not fulfil the stated purpose “to create a broad state of the art of research based FM knowledge”. The papers more form a set of heterogeneous bricks that provide facets to the overall picture of FM knowledge. None the less – the papers both on their own and seen together give important evidence concerning the increasing maturity of FM as an academic discipline and professional practice as well as new insights into what we know and what we need to know about FM; thereby contributing to the advancements in FM knowledge. As editor I would like to thank the authors for offering us their findings, ideas and food for thought.

**Per Anker Jensen**  
*Guest Editor*

#### **About the guest editor**

Per Anker Jensen is professor in Facilities Management at The Technical University of Denmark and head of the externally funded Centre for Facilities Management – Realdania Research. He holds the degrees of MSc in Civil Engineering, PhD and MBA. Besides research and teaching he has 20 years of experience from practice as consultant, project manager and facilities manager. His research interest concerns how briefing, design, development and management of physical facilities can add value to users and organisations.

#### **References**

- Jensen, P.A. and Andersen, P.D. (2010), *The FM Sector and its Status in the Nordic Countries*. Research Report. Centre for Facilities Management – Realdania Research, DTU Management Engineering, Report 21:2010.
- Jensen, P.A. and Van der Voordt, T. (eds.) (2017), *Facilities Management and Corporate Real Estate Management as Value Drivers: how to Manage and Measure Adding Value*. Oxfordshire: Routledge.

Jensen, P.A., Van der Voordt, T. and Coenen, C. (eds.) et al. (2012), *The Added Value of Facilities Management – Concepts, Findings and Perspectives*. Centre for Facilities Management - Realdania Research, DTU Management Engineering, and Polyteknisk Forlag.

Nenonen, S., Jensen, P.A. and Lindahl, G. (2014), *Knowledge Map of Facilities Management*. Proceedings of EFMC 2014 Conference and Research Symposium, Berlin, 4-6 June 2014.